

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application. No new matter has been added.

1-38 (*Previously canceled*).

39. (*Currently amended*) An automated method for processing of samples ~~on~~ linked to solid supports, the method comprising:

(a) loading each sample linked to a solid support into a sample well of a plurality of wells in a sample/collection container with one sample and solid support combination per sample well, wherein the sample/collection container comprises a plurality of wells, each well having a bottom, an inner diameter adapted for receiving the solid support, and at least one protrusion extending radially into the well for restricting the inner diameter of the well to prevent the solid support from dropping to the bottom of the well;

(b) loading a plurality of sample/collection containers onto a rotor position on a centrifuge rotor within an openable centrifuge chamber;

(c) rotating the centrifuge rotor to position a first sample/collection container below a dispensing head having a plurality of dispensing tips, with one dispensing tip corresponding to each well of the plurality of wells.;

(d) dispensing a processing solution into the plurality of wells of the first sample/collection container;

(e) rotating the centrifuge rotor to position a second sample/collection container below the dispensing head;

(f) under computer control, dispensing the processing solution into the plurality of wells of the second sample/collection container;

(g) repeating steps (e) and (f) until all sample/collection containers of the plurality have received the processing solution;

(h) under computer control, rotating the centrifuge rotor to spin the plurality of sample/collection containers to complete the processing of the samples; and

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(i) halting the centrifuge rotor after completion of the processing and unloading the sample/collection containers.

40. (*Original*) The method of claim 39, further comprising, during step (h), heating the sample/collection containers with a heat source to enhance the processing of the samples.

41. (*Original*) The method of claim 40, further comprising, prior to step (b), placing a heat plate at each rotor position for uniform distribution of heat from the heat source.

42. (*Original*) The method of claim 40, further comprising detecting the temperature of at least one heat plate and providing feedback for control of the heat source.

43. (*Original*) The method of claim 39, further comprising reducing a pressure within the centrifuge chamber using a plurality of vacuum pumps.

44. (*Original*) The method of claim 39, wherein each sample/collection container has a unique identifier, the method further comprising after step (b), under computer control, reading the unique identifier and storing the unique identifier in a computer memory.

45. (*Original*) The method of claim 44, wherein the unique identifier is a bar code disposed on the sample/collection container.

46. (*Previously presented*) The method of claim 39, wherein the wherein the sample/collection container comprises a separable assembly of a sample container and a collection container, each container having a plurality of wells formed therein, wherein the sample container has a plurality of drains connected to the wells, the method further comprising, during step (h), transferring, under centrifugal force, a solution from each well in the sample container into a corresponding well of the collection container, wherein the solid supports remain in the wells of the sample container.

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47. (*Previously presented*) The method of claim 46, wherein each well in the sample container is configured as a column with a plurality of porous plugs disposed therein for retaining the solid support and a biological sample therebetween.

48. (*Previously presented*) The method of claim 46, wherein the sample container and the collection container each have a unique identifier disposed thereon.

49. (*Original*) The method of claim 39, wherein the solid supports are selected from the group consisting of loose beads, tubes, pins, crowns, disks, balls, cubes, blocks, and porous containers containing resin particles or beads.

50. – 51. (*Canceled*)

52. (*Currently amended*) The method of claim ~~51~~ 39, wherein the at least one protrusion comprises a rib, ridge, ring or tab.

53. (*Original*) The method of claim 39, wherein the centrifuge rotor operates at a plurality of speeds, and step (h) comprises rotating the centrifuge rotor at a first speed for cleaving the samples from the solid supports and at a higher second speed for transfer and/or concentration of a cleaved sample.

54. (*Previously presented*) The method of claim 53, wherein the first speed is selected to minimize creep.

55. (*Previously presented*) The method of claim 54, wherein the first speed is on the order of 20 to 30 r.p.m.

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56. *(Previously presented)* The method of claim 53, wherein the second speed is selected to reduce bumping.

57. *(Previously presented)* The method of claim 56, wherein the second speed is on the order of 800 r.p.m.

58. *(Original)* The method of claim 39, wherein the steps of dispensing comprise: pumping a solution from a solution source into a reservoir; pumping the solution from the reservoir through a plurality of tubes, wherein one tube corresponds to each dispensing tip of the plurality of dispensing tips.

59. *(Previously presented)* The method of claim 58, wherein further comprising measuring the amount of solution pumped into each tube.

60. *(Previously presented)* The method of claim 58, further comprising purging the plurality of tubes and plurality of dispensing tips with a gas after the solution has been dispensed.

61. *(Original)* The method of claim 39, wherein the steps of dispensing further comprises, under computer control, detecting alignment of the dispensing head with the sample/collection container.

62. *(Original)* The method of claim 39, wherein the sample is a chemical compound and the solution comprises a cleaving solution.

63. *(Original)* The method of claim 39, wherein the sample is a biological sample containing DNA and the solution comprises a washing or eluting solution.

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64. (*Previously presented*) The method of claim 63, wherein the sample/collection container comprises a separable assembly of a sample container and a collection container, and further comprising the step after step (i) of removing the collection container containing waste solution and replacing the collection container with a clean collection container, and repeating steps (b) through (h) until purified DNA is transferred into the clean collection container.